

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : B65D 81/24	A1	(11) International Publication Number: WO 97/09249 (43) International Publication Date: 13 March 1997 (13.03.97)
(21) International Application Number: PCT/HU96/00044 (22) International Filing Date: 22 August 1996 (22.08.96) (30) Priority Data: P 95 02605 6 September 1995 (06.09.95) HU (71) Applicant (for all designated States except US): NATURLAND RT. [HU/HU]; Engels u. 10, H-9200 Mosonmagyaróvár (HU). (72) Inventor; and (75) Inventor/Applicant (for US only): SZABÓ, József [HU/HU]; Flesch K. út 6, H-9200 Mosonmagyaróvár (HU). (74) Agent: INTERINNO PATENT OFFICE; Margit krt. 73, H-1024 Budapest (HU).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: PACKING MATERIAL HAVING BIOLOGICALLY ACTIVATING EFFECT (57) Abstract The invention relates to packing material having biologically activating effect, characterized in that one or more surface(s) of it is/are provided with fixed permanent magnet and/or permanent magnet insert. The packing material according to the invention is preferably used for foodstuffs, cosmetics, hygienic products, medicinal products.		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AM	Armenia	GB	United Kingdom	MW	Malawi
AT	Austria	GE	Georgia	MX	Mexico
AU	Australia	GN	Guinea	NE	Niger
BB	Barbados	GR	Greece	NL	Netherlands
BE	Belgium	HU	Hungary	NO	Norway
BF	Burkina Faso	IE	Ireland	NZ	New Zealand
BG	Bulgaria	IT	Italy	PL	Poland
BJ	Benin	JP	Japan	PT	Portugal
BR	Brazil	KE	Kenya	RO	Romania
BY	Belarus	KG	Kyrgyzstan	RU	Russian Federation
CA	Canada	KP	Democratic People's Republic of Korea	SD	Sudan
CF	Central African Republic	KR	Republic of Korea	SE	Sweden
CG	Congo	KZ	Kazakhstan	SG	Singapore
CH	Switzerland	LI	Liechtenstein	SI	Slovenia
CI	Côte d'Ivoire	LK	Sri Lanka	SK	Slovakia
CM	Cameroon	LR	Liberia	SN	Senegal
CN	China	LT	Lithuania	SZ	Swaziland
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	LV	Latvia	TG	Togo
DE	Germany	MC	Monaco	TJ	Tajikistan
DK	Denmark	MD	Republic of Moldova	TT	Trinidad and Tobago
EE	Estonia	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	UG	Uganda
FI	Finland	MN	Mongolia	US	United States of America
FR	France	MR	Mauritania	UZ	Uzbekistan
GA	Gabon			VN	Viet Nam

Packing material having biologically activating effect

The invention relates to packing material having biologically activating effect.

5 Foodstuffs, cosmetics, pharmaceutical products are issued in different packing.

The products can be packed in paper cases, plastic cases or encasements, glass or porcelain or ceramic bottle, jar or box, plastic box etc.

10 The role of packing is to serve as storing container for protecting the product from external effects such as oxidation, UV radiation, drying out or evaporation.

The packing can further have aesthetic purposes.

To date no packing material has been known which would
15 have biologically activating effect on the stored product.

We have surprisingly found that supplying the package of the products, the packing material with permanent magnet, the magnetic field created will have an influence also on
20 the product.

Our experiments have shown that the product exposed to magnetic field had a biologically more favourable effect, e.g. the active ingredient of the product was absorbed more quickly and efficiently by the body, and other
25 physiologically advantageous effects were also experienced.

The effect of magnetic field on water is described in the

Hungarian patent specification No. 187 898. According to said patent specification when the water is conducted through a pipe which has an iron core and a magnet is placed on the mantle of the pipe, the magnetic field
5 created inhibits the deposition of scale.

The Hungarian patent application published under the number T/68 389 discloses the effect of magnetic field exerted on the growth of plants and microorganisms. However, packing material which would activate the
10 product by magnetic field during storage and produce thereby a favourable physiological effect, have not been described yet.

Thus, the subject of the present invention is a packing material having biologically activating effect, preferably
15 ably for use for foodstuffs, cosmetics, hygienic and medicinal products.

The packing material is characterized in that to the surface of it one or more permanent magnet is/are fixed and/or it is provided with permanent magnetic inset.
20 The effect of the magnetic field created by the permanent magnet can optionally be increased by placing the packing material containing the product and supplied with permanent magnet, into magnetic field created by electric magnet or permanent magnet, and keeping it there for 1-60
25 minutes.

This post-treatment represents, however, only a preferably process.

In most cases the permanent magnet placed into the packing material or on the surface of it, creates a magnetic field strong enough to exert suitable effect on the product.

- 5 The packing material according to the invention can be used for packing foodstuffs, e. g. coffee, tea, spices, mineral waters, fruit juices and the like, hygienic products, e.g. tooth-pastes, cosmetics, e. g. creams, tonics, gels etc.
- 10 The packing material can be a plastic or glass bottle, in this case a magnetic inset is placed into the screw cap. The packing material according to the invention can also be a paper box, where the surface of the paper is provided with one or more magnetic strip.
- 15 Within the scope of the present invention is e. g. a metal or plastic tooth-paste tube in the screw cap of which magnetic inset is placed and the screw-thread of the neck of the tube is made of magnetic material. Similar solution can be applied also in the case of
- 20 cosmetic tubes, jars.
- The results of our experiments show that the active ingredient of the tooth-paste stored in a packing material according to the invention, is absorbed more quickly and it has increased physiological influence,
- 25 e.g. the antibacterial effect of the tooth-paste is enhanced and the formation of incrustation is suppressed to a greater extent.

Also in the case of beauty preparations containing active ingredients, the experiments show increased absorption, the strengthening of the effect of the active ingredient.

- 5 The packing material according to the invention can be made of paper, plastic, glass, porcelain, ceramic, metal, wood, leather, textile etc.

What we claim is:

1. Packing material having biologically activating effect, preferably for use for foodstuffs, cosmetics, hygienic products, medicinal products, characterized in that one or more surface(s) of the packing material is/are provided with fixed permanent magnet and/or permanent magnet inset.

10 2. The packing material according to Claim 1, characterized in that into the packing material made of paper, plastic, glass, porcelain, ceramic, metal, wood, leather, textile, or on the surface of it one or more permanent magnet is placed.

INTERNATIONAL SEARCH REPORT

Intern: d Application No
PCT/HU 96/00044

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 B65D81/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR,A,2 649 959 (DELBES, COCHAND, THEBAULT, BABOT) 25 January 1991 see the whole document ---	1,2
X	FR,A,2 643 551 (BONTEMPS) 31 August 1990 see the whole document ---	1,2
X	US,A,4 872 401 (LEE) 10 October 1989 see the whole document ---	1,2
X	FR,A,2 590 165 (BERUS) 22 May 1987 see the whole document -----	1,2

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *&* document member of the same patent family

Date of the actual completion of the international search

13 December 1996

Date of mailing of the international search report

- 9. 01. 97

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+ 31-70) 340-3016

Authorized officer

Lenoir, C

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/HU 96/00044

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR-A-2649959	25-01-91	NONE	
FR-A-2643551	31-08-90	FR-A- 2636049	09-03-90
US-A-4872401	10-10-89	NONE	
FR-A-2590165	22-05-87	NONE	